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Associated Students of the Montana School of Mines

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DO YOU KNOW YOUR MBMG?

(STORY, PAGE 5)

Montana School of Mines

AMPLIFIER

Published by the Associated Students of the Montana School of Mines



Vol. IX, No. 8

BUTTE, MONTANA

Thursday, March 19, 1964

TV PROGRAMS CONTINUE

by Mae Brennan

A series of TV programs, designed to tell young people and their parents something of the fascinating world of science and engineering, are continuing. March speakers have been Prof. Ralph Smith, March 3; Prof. Donald McGlashan, Prof. Gordon Ziesing, Ray Brennan, John Richards, Dan Rovig, and Guido Villena, March 10; and Prof. William Vine and Prof. William Van Matre, March 17.

Dr. Koch Introduces Speaker

Presenting the 5th program of this series, Dr. Edwin Koch, president of Montana School of Mines, remarked, "As we enter the space age, we face an increasing shortage of scientists and engineers who are qualified to meet the challenge of the times. Because of this, MSM, being a school centered and devoted to the training of scientists and engineers, has felt that it is time that the young people of this community and surrounding communities be introduced to some of the fascinating aspects of science and engineering, so that they would consider the entering of one of these various fields as a possible career." He then introduced Prof. Ralph Smith, associate professor of metallurgy, who spoke on "Ceramic Testing." Prof. Smith's assistant was G. P. Ramulu from India, a senior at MSM, studying to be a metallurgical engineer.

Ceramic Testing

Smith described the different steps used in testing ceramics. He defined ceramics as a science of clay materials. First, sedimentary clays, which are found in this area, are ground to a very fine product. Then a burette is used to measure the amount of water needed to mix with the clay material to make it plastic; its "higher limit" is found by adding water until it falls apart. The point midway between these two measurements will give the plasticity of the clay.

To find the softening point or refractive point of the clay, pyrometric cones (test cones) are made from the clay material and surrounded by standard cones (manufactured and guaranteed to burn at given temperatures) and then fired at different temperatures. Ceramics do not melt, but soften over a range.

"Defects in ceramic materials are caused by impurities or foreign matter in clay, too much iron content, or excess chemicals," commented Prof. Smith.

Mineral Dressers' Program

Prof. Donald McGlashan, head of the Mines' Mineral-Dressing Department, served as moderator for Prof. Gordon Ziesing, instructor in mineral-dressing, and Ray Brennan, John Richards, Dan Rovig, and Guido Villena, graduate students at (Continued On Page 3)

Pet Students Attend Hearings

On Thursday, March 12, twenty-two MSM junior, senior, and graduate students in petroleum engineering attended a group of hearings before the Montana Oil and Gas Conservation Commission in Helena.

At these hearings, petroleum engineers testified as experts to justify their companies' requests to undertake certain projects on the basis of natural-resources conservation. It is believed that the student can gain an insight into another of the many fascinating aspects of his career by attendance at a typical hearing such as this.

Those who attended the hearing in Helena are Kenneth Arne, Mansoor Awan, William Bayliff, Walter Busenius, John F. Callahan, John F. Evans, Peter Gross, William Halvorson, Joseph Kandle, Thomas Liebsch, William Madison, Walter Nellis, Kishore Parekh, Gerald Peters, Frank Quilici, Edward Shumaker, Edward Simonich, Calvin Strobel, Keith Tyner, Jack Weaver, Rodney Ylitalo, and Curtis Peterson.

Mineral Dressers 'Seminar': Rovig, Villena, Ziesing

by Michael Mayne

The third of the present series of mineral-dressing engineering seminars was given March 2, by Mr. A. D. Rovig, an MSM graduate student.



A. D. ROVIG

Rovig began his speech, entitled "Previous Research for the Separation and Concentration of Fine-sized Vermiculite," by explaining the method used to concentrate coarse-sized vermiculite in the Libby, Montana, area. He then continued with a discussion of several other methods of concentrating vermiculite, including the Air Table and Electrostatic Separation methods.

Rovig concluded by saying that "far too much emphasis has been placed on finding a miracle machine that will make amine and oil a wondrous, one-pass collector." Rather than this "miracle machine," Rovig feels that a systematic study of vermiculite and its associated gangue minerals must be initiated.



G. D. VILLENA

The fourth seminar of the series was presented by Mr. G. D. Villena, a native of Bolivia, also a graduate student. Villena spoke on the subject of "Electrophoretic Measurement on Cassiterite" and reviewed such concepts as the zeta-potential and electric double layer of cassiterite (tin ore).

Villena then discussed some of the experimental results obtained with electrophoretic methods on synthetic cassiterite. Fundamental research in these and associated areas will provide a better understanding of cassiterite and will "make it possible to develop a sound method to concentrate the Bolivian low-grade and complex tin ores."

The last of this series of seminars was presented March 16, by Mr. G. F. Ziesing, instructor in mineral-dressing engineering. Ziesing spoke on the "Measurement of Streaming Potential." According to Ziesing, the object of this study is "to develop instrumentation for rapid and accurate determination of streaming potentials and associated parameters."

Convocation Features Audubon Speaker

by Gary Treglown

"A most enjoyable and informative program," remarked one member of the MSM faculty, Tuesday, March 10, following the Audubon Society lecture given by William Ferguson in the Museum. This lecture is one of a series which Mr. Ferguson is presenting throughout our state as representative of the National Audubon Society.

Mr. Ferguson began his program with a few short remarks concerning the importance of the motion of the earth and the changes which would occur if this motion were stopped. He then presented a film, which he had photographed, entitled "Once Around the Sun." This film was taken in several states, but primarily in Nebraska and Colorado, where the Fergusons make their winter and summer homes. The beautiful scenes of birds and wildlife of our nation were made more interesting by a clever narration given by Ferguson.

The film took its audience on a colorful journey, beginning January 1 and ending December 31, which included a study of flowers and wildlife under the conditions of each of the four seasons. More than 30 species of birds were shown, along with pictures of bison, moose, elk, squirrels, gophers, reindeer, and bear. Seasonal flowers and leaves added hues and brilliance to the presentation.

Among the audience were several grade-school children and other visitors to see the one-hour, thirty-minute program.

Mr. Ferguson is a cartoonist by profession, who has studied this art at the Academy of Fine Arts, Chicago. Employed by a group of papers known as "The Corn Belt Farm Dailies," he and his family reside in Omaha but spend their summers in Estes Park, high in the Colorado Rockies. He has also originated an educational cartoon, "This Curious World," which is carried by hundreds of newspapers in the United States and Canada by NEA Service.

He is now one of the many official representatives of the National Audubon Society and travels throughout the U. S., giving programs on our nation's conservation.

Apropos these convocations, Professor Ralph Smith, chairman of the Public Events Committee, urges all students to attend their assemblies—"of an informative and educational, as well as entertaining, nature."

Laity Authors Article

An article by Professor Clifford Laity, head, HSS Department, was published in the Winter 1964, **Councilletter**, which is a new paper issued by the Montana Council of College and University Teachers of English. This letter concerns the need for offering a basic one-year, or possibly two-year, course in all the units of the Montana University system.

"As each of the units has become more competitive and less cooperative, as the concept of the six units comprising one great university dims, students are finding it more and more difficult to transfer from one unit to another... without loss of time," states Laity. He then gives a summary of the first-year course—many students take two years—offered at the School of Mines, and re-emphasizes the need for cooperative effort among the schools to afford more Montana students the opportunity for higher education.

Dr. Leslie Fiedler, MSU English professor and well-known writer and critic, is also represented in this issue. His article advocates the need to continue the English-Council meetings of the University of Montana.



WILLIAM FERGUSON

Engineering Fundamentals

by Lynn Estey

The scheduled evening review sessions of basic-engineering fundamentals, initiated at Mines on March 9, will continue through April 6.

Review Schedule

These sessions, sponsored by the Butte Chapter of the Montana Society of Engineers, are being conducted by School of Mines faculty members. Five of the scheduled 10 sessions, lasting from 7:30 to 9:30 p.m., on Monday, Wednesday, and Thursday, have been concluded. These reviews comprised the following:

March 9—Mathematics—Vine
March 11—Statics—Young
March 12—Chemistry—Ensley
March 16—Dynamics—Stout
March 18—Strength of Materials—Stout

The remaining five meetings are listed as follows:

March 19—Fluid Mechanics—Stout
March 30—Physics—McCaslin
April 1—Electricity—Young
April 2—Thermodynamics—Stout
April 6—Economics—Van Matre

These sessions have a dual purpose: first, to further prepare the engineering student for the engineer-in-training examinations, slated for April 25; and second, to provide a general review of basic-engineering fundamentals for practicing engineers.

There is no charge for engineering students. Practicing engineers, however, interested in preparations for EIT or advanced engineering exams, are required to pay a \$10 fee, which covers 10 review sessions. It is estimated that 20 practicing engineers can be accommodated.

Stolz's Expectations

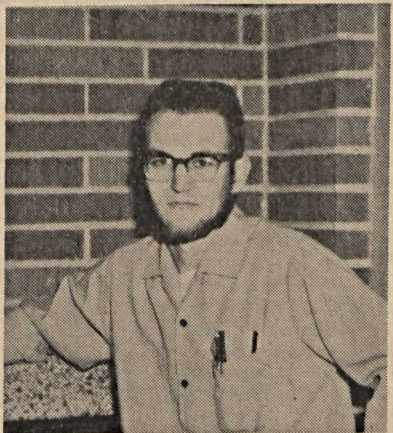
Gustav Stolz, president of the local chapter of the Montana Society of Engineers, has expressed hope for good turnouts. "These sessions," Stolz declared, "will demonstrate to the student the practicing engineer's interest in the professional development of the neophyte engineer. The emphasis is on professional development, for it is vital to the future of the engineer to become professionally registered."

Professors Uno Sahinen and Robert Geach (MBMG) were appointed chairmen of the project.

Cobb Foundation Awards Scholarships Banning, Caddy Named

by Jean Krier

Two MSM sophomores, William R. Banning and Joseph M. Caddy, have been awarded Cobb Foundation Scholarships, according to W. M. Brown, registrar and chairman of the college's Scholarship Committee. The Cobb Foundation Scholarships of \$250 each are given on the basis of scholarship and need. They were established by the foundation of which Mrs. Mary L. Cobb of Great Falls is president.



WILLIAM R. BANNING

Banning, who is studying mineral-dressing engineering at Mines, is a graduate of Beaverhead County High School in Dillon and was a member of the National Honor Society. During summers, he has worked in surveying and carpentry for Vigilante Electric Co-op and Hughes Homes, Inc., respectively.

Caddy, a graduate of Butte High School, is studying metallurgy. He was also a member of the National Honor Society in high school. He has been employed as a laborer for City Heating and Electric. Caddy and his wife reside at 1221 West Porphyry Street.



JOSEPH M. CADDY

Neither of the students knew that he was to receive the award until February 27, when, according to Banning, he found "a check for \$250 with a little note attached" in his mailbox.

PHILOSOPHY OF EDUCATION

Without mincing words, Montana School of Mines and the State of Montana are rapidly approaching a crisis. The educational practices now being pursued are leading to the eventual demise of this college and to the acceptance of second-rate colleges in the rest of Montana.

It is our contention that the lack of dynamic approach toward education is hurting the future of this institution and its students. The whole structure of our educational system appears to be rotten. When a college is forced to prove its usefulness by showing an adequate tally of warm bodies, then we feel that no matter how many warm bodies can be produced, the college will still fail its purpose. Not only is the college hurting itself and its reputation by attempting a mass program to fill seats, but the people who fill these seats are hurt by the inadequacies of the college that wooed them.

Education should never have to be justified in terms of numbers, or in terms of dollars. Those who ask, "Of what value is this college?" should find sufficient answer in John Henry Newman's works, particularly that titled *The Idea of a University*. In a large respect, knowledge should be for its own sake. We are assuming that an economic justification of our college is readily available; further, that this justification is easily conclusive.

With an understanding of the basic purposes of an educational system must also come a purposeful and mature outlook on the methods used to achieve this education. The student should not tolerate poor or shoddy education; and, certainly, the college, and its backing sources, should never allow it to be presented. However, in our own school, lecture sections become so large that the student has little opportunity to pursue ideas and theories of his own. If it is impossible for the learned to challenge the novice, and the novice, in turn, to challenge the learned, then education becomes meaningless. Yet, in our own school, this situation exists; it would be far more convenient if the students in one of our large lecture sections were handed a textbook and told to return for an examination when they had mastered the material. The advantages of education that are supposed to exist at a small college are very often lacking at our college.

Cognizant of the fiscal situation in the State of Montana, we still believe that the colleges should not have to fight for their niggardly dole. There exists no reason why Montana School of Mines cannot rise above the levels of a competent vocational training school and achieve status amongst the best of engineering colleges. Departments should not be compelled to use subsistence allowances to support their teaching programs; a college should not have to turn pockets inside out to find funds to purchase a computer, when already some high schools find it a necessary adjunct to their training. In short, serious changes must be made.

The alumni have proposed a name change for our college. It is not the name that must be changed for survival; it is the entire philosophy of education that needs review—and revision.

MATURITY

In our last issue of March 5, we proposed a different approach to class attendance than what is usually currently practiced. Perhaps we did not stress sufficiently that for this system to be feasible a mature outlook must be envisaged by the student, and by the faculty toward the student. The instructor can hardly be expected to treat the student with respect if he is not capable of commanding respect. In addition, the student will respond childishly if he is so treated.

In other continents, a different view is taken toward required attendance; the Europeans, for instance, require no mandatory attendance. Instead, it is assumed that the student will follow lecture series that are offered, to maintain the level of his own work. The college insures his performance by not awarding graduation until a series of stiff examinations are successfully passed. Actually, this method of study places the burden of work on the student, but it also creates a better response in the student. We feel that, in moderation, this system would work well here at MSM.

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MCKEE PRINT

PRIMA FACIE

Students Appraise Mines
Canvassed by Mae Brennan

Following are some student views of their first look at college.

Mike Mayne: "After three years in the army, I was eager to see what college life would be like. After the first few days of confusion, I decided that college life was worthwhile."

Jean Krier: "The Mines offered everything I wanted in a college—an average social life, many men, and a fair general curriculum. It's better than many students would expect."

Marg Gardner: "The summer didn't seem long enough, and I was reluctant to settle down. I had no definite thoughts about the Mines; so I was neither disappointed nor satisfied. After being exposed to college life for a semester, I regret that I can only spend 2 years here."

Kathy Verona: "I was looking forward to starting school at the Mines. It has everything to offer—from excellent curricula to a variety of activities. I plan to attend next year, because I enjoy it so much."

John Giacomino: "Upon entering college, I lost my weekly paycheck but gained something money can't buy—"education." MSM has an air of friendliness among the students which makes one feel at home. The first day was surprising because of the high coed enrollment. Let's hope it's larger next year."

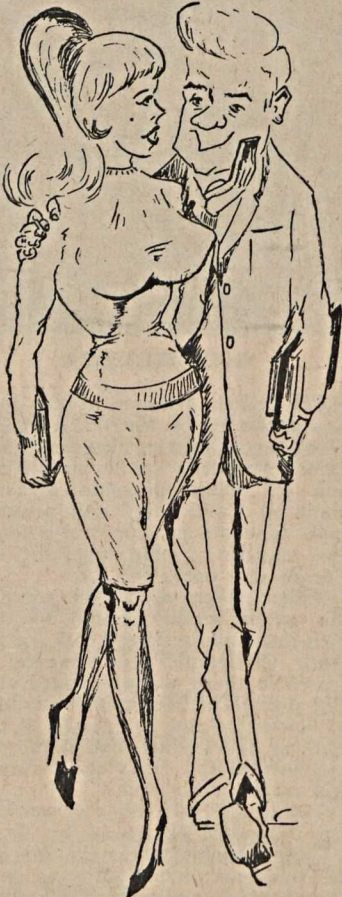
Maureen Williams: "Upon entering college, I was surprised at the differences in college classes from those I was used to in high school. At first, I did not think I would like the change from high school to college. But now that I am accustomed to college, I really prefer it."

Carol Patrick: "The first week was very confusing. I never knew what would come next. As for the teachers and students, they are the friendliest."

Mrs. Ruth Toppari: "As I had been out of school for four years, my first day was a new, terrifying experience. But by the end of the day, through the helpfulness of the professors and the warmth and friendliness of the students, I felt accepted. I enjoy MSM very much and regret I can spend only two years here."

Bill Chebul: "After putting a 3-year hitch in the navy, I decided that college was my next ambition. Being separated from school and having had no prior college experience, I was completely lost on registration day. I only hope that I can 'benefit' from a college degree in journalism."

Midge Winston: "The first day of college for me was really quite a day. This was the day of registration, and what a mess it turned out to be! I never saw so many people jammed into a room in my life. Things have improved, however, since the first day. MSM is really quite a place."



FAMOUS LAST WORDS
WHAT CAN GENERAL STUDENTS
DO FOR THIS CAMPUS ?

COED CUES

by Lee Ann Peterson

Hootenanny

The Hootenanny and Grubby Dance, which was held Saturday night, March 7, proved a great success. Everybody turned out for the occasion in his grubbier garb, from nightshirts and gunny sacks to coveralls and cutoffs. Dave Rovig was right in style, wearing a grubby nightshirt and a black face and beard. Bill Chebul came as Snuffy Smith. His costume was authentic, even down to the jug!

For the Hootenanny, Bill McLaughlin, Gooch Robinson, Mike Lewis, and Jim McArthur did a very good imitation of The Beatles; and George Barker played the piano while everybody sang.

The informality of dress seemed to add much to the festivity of the evening. This is the kind of mixer that we should have more often. Does anyone have any more ideas on "different" kinds of mixers?

Sylvia White

Sylvia White, former School of Mines coed, who recently returned from the Winter Olympics and skating competition in Sweden and East Berlin, feels that if there were an Olympics every year, world tensions might relax.

Sylvia said that the young people from all the countries, including Russia, were very friendly and helpful. Everyone was sympathetic when someone fell, and praiseworthy when someone did well.

Sylvia placed fifth in the 500- and 1,000-meter races and sixth in the 1,500- and 3,000-meter events in the East Berlin invitational events. Twenty skaters from the United States, Germany, and Poland took part.

Have You Heard?

A few of the coeds are putting their Centennial Kissing Kards to use in many ways—as book marks and???

It seems that Rudy Wachtler and Mike Arne are opening up a profitable business in Denver. Too bad it's illegal!!

It's quite apparent that Rudy Wachtler got his driver's license out of a crackerjack box, the way he drives. Careful there, man!

William Coghlan and his wife, the former Sharon Breen, report that Professor Laity's son, John, is driving a Chevrolet on the Stanford University campus!

Edna Shumaker and Russlynn Bills are trying out all types of perfumes these days. Which type do you prefer, 'girls'?

Oh say, Great Pumpkin, do you always have dreamy visitors coming to your apartment?

You've no doubt heard the saying, "Right church, wrong pews." Pat Dooley and George Barker have a different version. It goes, "Right street, wrong house."

Have you ever tried to put eight women and a dozen suitcases into a broken-down college heap, and then travel 250 miles? Well, the coed delegates mastered this technique going to the Billings MIAWS Conference. What a feminine disaster! And then to make matters even more interesting, several of the girls viewed the passing scenery after it had already been passed! You see, a few passengers rode "shotgun."

The Vegas Club was a real swinging place Friday night, February 29. That was the night Sigma Rho had its famous dinner party, featuring a delightful dance routine by Jane Gibson.

Montana School of Mines has taken on the appearance of Hollywood, even if there is still a foot of snow on the ground. Sun glasses are the only answer to the brilliant sunbeams drenching Sub these spring mornings. Some stars have even been known to give out their autographs.

Say, Prof. Laity, all of your history of civilization classes thoroughly enjoyed the rendition you gave of the story of Madame Krudner and the Holy Alliance. What we are all wondering about, however, is how you happen to know so much about her!

ALERT—We have been invaded by men from Mars. At least, it sure looks that way. Several of the mining-engineering students have been taking Mine Rescue Training and have been seen walking the streets with their masks and other apparatus. How many little old ladies and children did you frighten, fellas?

From The Desk
of The Student
Body President

by Jocko Evans
Student Senate



Saturday, March 7, the Student Council met with some of the leaders on campus to discuss the pending Student Senate. At this meeting, the decision was made to hold another meeting, with representatives from all chartered clubs on campus, to determine whether interest is keen enough to complete and implement the Senate plan. A tentative date for this meeting is April 4. Again, I urge all interested persons to attend this meeting.

Football

After the last *Amplifier* issue, I noted a keen interest among prospective football players concerning spring training this semester. A list of some thirty-five names was turned into Coach Simonich by Gooch Robinson. If any other men are planning to practice this spring, they should notify the coach. Should we have spring practice this year, I think that we will be "the team to beat" next year. It has been a long time since the football team has added a trophy to the case in the Sub.

Another idea to help make M-Day more successful this year is to have the intersarsity football game Tuesday afternoon, May 5. Weather providing, this game would be a terrific "kick-off" for M-Day.

Beard-Growing Contest

The Student Council has decided to sponsor a beard-growing contest, with the final judging M-Day. Although we have not as yet determined the prizes, it is possible that awards will be given to first, second, and the "scroungiest" beard.

Club Bits

by Margaret Gardner

International Club

At recent meetings, the International Club formulated its plans for the annual dance which it sponsors. The dance will have many inviting features, including exotic foreign food, appropriate decorations, live music, and outside entertainment. For a theme the club selected "Moonlight on the Nile". The dance will be held on Thursday, March 19.

ASM

The American Society for Metals held a meeting on March 4. Selected films on "The Metallurgy of Iron and Steel" were shown, followed by a refreshment period. The film served as an ideal insight into metallurgy for both those enrolled in this subject and other interested persons.

Theta Tau

Theta Tau fraternity members met on March 5 for a short business meeting. The delegates to the convention gave a report on their trip to Golden, Colorado. The chief item discussed was a party the fraternity is sponsoring for the coeds and Theta Tau members, the party being slated for April 4 at the Longfellow School. Before completion of the meeting, the group voted a Columbia University man into honorary membership.

Newman Club

Newmanites met on March 10 to hear a discussion by Father Burns on "Monasticism and Mohammedanism." Before the talk, Dan Stowe, president of the MSM group, conducted a short business meeting. It was decided that the election of officers should take place at the next meeting. After his talk, Father Burns answered questions. The meeting closed with a prayer.

THE MELODY

A melody of love and cheer
Brings hope to the broken heart,
And lifts the heavy, burdened soul
That tears the strong apart.
A song gives peace within the mind
That once was lost in sorrow,
And brings a brighter, future look
For those the next tomorrow.

by Donna Burks

Shift Boss To Student

by Margaret Gardner

What would compel a person to give up a well-established job and assume the role of a student? After 16 years of employment, Arnold Buchanan has decided to take advantage of the education offered by the Montana School of Mines. Mr. Buchanan, while working in the mines, witnessed the advances made by others with a degree. He realized that job advancement in any area is limited because of lack of education. Job security was another factor which influenced his decision.

Arnold graduated from high school in Washington, later coming to Butte as an employee of the Anaconda Company. He married Lucille Buettner of this city; they have two daughters. When asked what it was like, returning to school after more than ten years away from studies, Arnold replied, "My biggest problem is readjusting to long-forgotten study habits. I didn't realize how much I was missing, or I would have started earlier."

Many students at the Mines will remember "Guns" Buchanan as a shift boss at the Mountain Con Mine, and will wish him luck as a fellow student.



ARNOLD BUCHANAN

TV PROGRAMS CONTINUE

(Continued From Page 1)

MSM, who described research projects in the Mineral-Dressing Department.

Brennan informed the viewers that MSM has employed a Dekameter, which measures the electrical properties in asphalt. It is hoped this project will help solve the deterioration of our roadbeds.

The American Metal Climax Co., located near Denver, produces 60% of the free world supply of molybdenum ore, according to Richards. This ore is used as a steel alloy; it is also used in lubricants, paint pigments, fertilizers, and is becoming an important metal in the missile industry.

Vermiculite, explained Rovig, is a member of the mica family. The world's largest deposit of vermiculite is located 7 miles NW of Libby. Commercial uses of vermiculite are insulation material, plaster aggregate, wall-board material, ground conditioner, and masonry material.

Villena, whose home is Bolivia, described methods used in Bolivia to concentrate cassiterite, the chief ore of tin. Much of the ore is lost in a concentration process. Villena hopes to find an improved method of recovering tin concentrate, as cassiterite plays a very important role in Bolivia's economy.

Gordon Ziesing defined froth flotation as a process of ore concentration based on the selective adhesion to air of some ore particles from an ore water pulp and a simultaneous adhesion of other particles to water. He explained, "In order to perform the flotation process properly, certain procedures must be observed."

"Life History of a Mining Venture"

Prof. William Vine, head of the Department of Mining Engineering, and Prof. William Van Matre, instructor in mining, spoke jointly on the "Life History of a Mining Venture."

Their talk was presented on March 17 on St. Patrick's Day. St. Patrick is the patron saint of engineers.

Montana's state centennial is not the only centennial celebration this year, as 1964 marks the 100th year of the first School of Mines located at Columbia University.

Van Matre explained the (1) discovery: old and new methods of discovery of ore bodies; (2) exploration: determination of value and physical features of a particular ore body.

Vine discussed (1) development: preparation of an ore body for its extraction; and (2) exploitation: actual procedure of extracting an orebody from its environment. Vine added, "All of which takes engineering 'Know-How.'"

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"THE CAMPUS SHOP"

Rotary Club Offers Fellowships

by Jean Krier

The Rotary Foundation Fellowships, designed for a year of graduate study abroad, are presently being offered in the Butte district. The purpose of the fellowships is "to further understanding and friendly relations between peoples of different nations."

Qualifications

An applicant for a Rotary Fellowship must have a friendly personality and an ability to speak in public; hold a bachelor's degree by the time the fellowship is to begin; be able to read, write, and speak the language of the country of study; be a single male between the ages of 20 and 28; and be a citizen of the country of his permanent residence.

Amount of Award

The amount of the award ranges from \$2,500 to \$3,000, and includes round-trip transportation from the home to the university town in which the student is to study; full tuition, registration fees, essential books, and study materials; room and board and incidental living costs; and limited educational travel expenses within the country of study.

Adami Supervises

Further information and application blanks may be obtained from Dr. A. E. Adami or the Butte Rotary Club. The applicants must list five universities, not more than three of which may be in the same country; too, they must be located in countries where Rotary Clubs function. (There are Rotary Clubs in almost all free countries of the world.)

According to Adami, a member of the fellowship committee, the Rotary Foundation Fellow has a dual role, "ambassador of good will, and scholar." The fellowship provides young men with opportunities "to interpret their home countries within the country of study," and, upon return home, "to foster an understanding of their country of study."

Application deadline: April 15, 1964.

WOMEN HOST TEA

The faculty women and student wives were hostesses for a tea given Sunday, March 15, from 2:00 to 4:00 p.m., in the Student Union Building for the coeds, coed mothers, and mothers of MSM students in the surrounding Butte area. A St. Patrick's-Day theme "greened" the setting. A large crowd responded to the invitations.

The faculty women's committee consisted of Mrs. Koehler Stout and Mrs. William Van Matre (as co-chairwomen); Mrs. Willard Cox, Mrs. William Chance, Mrs. Kenneth McLeod, Mrs. Frank Kelly, Mrs. Donald McGlashan, Mrs. John McCaslin, and Mrs. Ralph King.

Those on the student wives' committee were Mrs. William Robinson, Mrs. Jack Weaver, Mrs. Bill Thompson, and Mrs. David Rose.

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Mr. G. L. Smit, who addressed the college March 2 and 3, about shaft-sinking methods, is shown with his host Prof. W. A. Vine, who, in conjunction with Stewart Hurlbut, Anaconda Co., brought him to Butte.

Retarded Children Projects Volunteers Needed

The Rocky Mountain Association for Retarded Children, Butte, has several projects in which students can participate as volunteers. In past summers, some of the Montana colleges have allowed college credit in courses dealing with mental retardation for observation and practice. The St. James-Community Hospital School of Nursing requires that the nursing students observe and assist in the nursery school classes.

The Butte Chapter of the Rocky Mountain Association for Retarded Children is seeking Butte-area college students who could do volunteer work for the summer activities in 1964. The program will include: (1) A summer day camp for school children, ages 6 to 21. Counselors are needed for boys and girls. The camp dates are the last two weeks in August. (2) A pilot education program in home economics and manual training for the older retarded students, to begin in June and continue until the summer day camp. Qualified teachers will have charge of the classes. Help is needed for individual work with the students. (3) The nursery school for retarded children will be in session during the summer. (This school has been open since 1961.) Student teachers in the primary grades might be interested in this phase of special education.

It may be possible for students to receive academic credit for such work, and persons interested in this possibility should make inquiries at institutions authorized to give degree programs in teacher education.

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Science Academy To Meet In April

This year, the annual meetings of the Montana Academy of Sciences will be held on April 17-18, on the MSM campus. Dr. Adam J. Smith, vice-president of the Mathematics-Statistics Section, hopes that all members and friends of the Montana Academy of Sciences "will plan to attend these meetings and actively participate in them."

Dr. Leroy H. Harvey, executive secretary of the Academy, has issued a "Call for Papers" to those interested in participation.

Here follows a general outline of the 1964 meetings:

Friday, April 17, 1964

- 1 p.m.—Board Meeting
- 3 p.m.—Council Meeting
- 7 p.m.—Annual meeting of members
- 8 p.m.—Feature address

Saturday, April 18, 1964

- 8-12 a.m.—Section Meetings
- 1 p.m.—Annual Luncheon

Dr. Smith announces that any member, or student, who wishes to present a paper should contact him very shortly. Miss Elizabeth Satter, assistant professor of mathematics, MSM campus, is assisting with arrangements.

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Summer Employment? Habashi Suggests Austria

Dr. Fathi Habashi, associate professor of metallurgy at MSM, has spent approximately four and one-half years in the small European country of Austria. Although much of this period was spent in Vienna, Habashi spent some time in the Austrian town of Linz. While at Linz, he worked in the industrial area there, which consists of a steel mill and associated chemical plant. Because of his relationship with the officials of this plant, Habashi is in a position to obtain summer employment in that area for any interested persons.

Thus, anyone intrigued by this offer should notify Dr. Habashi as soon as possible. Transportation to Austria will have to be financed by the individual, but is relatively inexpensive. Although the wage at the plant would not permit an extensive savings program, it would be sufficient to allow a reasonably complete tour of central Europe. As an example of the low cost of living in Austria, Habashi states that student admission to a concert is only ten cents.

Linz, situated between Salzburg and Vienna, is quite picturesque, being near such attractions as medieval castles. The town is something of a music center, being the home of the great musician, Johann Sebastian Bach, and is only a short drive from the city of Vienna, long noted for its musical fame. Linz is only slightly to the west of Salzburg, the birthplace of another great musician, Wolfgang Amadeus Mozart.

Habashi states that "any individual presently attending college is eligible for employment at Linz, and no previous language training is required." Employment of this type offers a wonderful opportunity "to learn to speak the German language, and to become acquainted with the Austrian way of life."

Time changes everything except something within us which is always surprised by change.—Thomas Hardy.

MSM ON THE MOVE

by Kay Chambers

Dr. John V. Byrne, associate professor, oceanography, at Oregon State University, Corvallis, appeared on campus March 19 and 20. Byrne, representing the American Geological Institute of Visiting Geoscientists, spoke on "Methods of Exploring the Ocean Floor" and "Geology of the Pacific Ocean Basin." The next issue of the *Amplifier* will carry some details.

Simonich Trips

Coach Ed Simonich on March 2 and 3 attended various athletic functions in Billings. He visited, on March 2, a Montana Collegiate Conference Meeting, and also on March 2 and 3 he was a participant at the National Association of Intercollegiate Athletics, District No. 5, tournament at Billings.

Simonich also traveled on March 8 to Kansas City, Mo., where he spent a week attending national NAIA meetings there.

On April 21, he will go to a high school-college conference in Livingston, Montana; and directly following this, he will journey to Miles City to be present at its college "Career Day," scheduled for April 22. By April 23, Simonich plans to be in Glasgow for College Night. Then on April 24, he will travel to Northern in Havre, to attend its College-Career Day.

High School Science Fairs

Various professors of MSM plan to visit, during the month of March, high school science fairs throughout the state.

On March 20, at the Helena Science Fair, those scheduled to be judges from the school are Professors Vernon Griffiths, Keith Ensley, Fred Earll, Robert Mannon, and Joseph Murray. These same men will also appear at Fort Benton on March 21 to judge the Science Fair there.

The Deer Lodge Science Fair, to be held March 20 and 21, will also see the attendance of personnel from MSM. Professors Ken McLeod, Frank Young, Koehler Stout, Elizabeth Satter, and Al Catenaro all plan to travel to Deer Lodge to help judge the fair.

The first president of the college was Nathan R. Leonard, noted mathematician. He was succeeded in 1906 by Charles H. Bowman.

Trask Delivers Seminar

The seminar, "Eh-PH Diagrams, Constructions and Uses", given by Frank Trask on March 11, consisted of a discussion showing the relation of chemical reactions between the acidity of the solution and the oxidation-reduction potential. The reactions are studied through free-energy calculations of the reactions and through the Nernst Equation.

Trask, a senior in geological engineering, stated that geologic implications lie in stability fields in both economic mineral deposition and sedimentation.

This talk was the first of a number of seminars to be given throughout the semester by students in the Geology Department.

Koch Attends Meeting

Dr. Edwin G. Koch, president of Montana School of Mines, traveled, on March 13, to Minneapolis to attend a meeting of the Board of Directors of the Ninth Federal Reserve Bank. He is one of the directors of the Helena Branch of the Minneapolis bank.

Groff Reviews Gold

Dr. Sid Groff, of the Montana Bureau of Mines and Geology, reminded his audience of important facts about gold in a talk delivered February 29, when he was principal speaker for the annual dinner of Sigma Rho Fraternity of MSM, held at the Vegas Club.

Groff, though complimenting the Federal Reserve System, strongly recommended federal action to revive the American gold-mining industry by enactment of pending legislation, and following through with a direct subsidy for productive properties.

He disagreed with proposals for the usual panaceas of raising the price of gold, going back to the classical gold standards, forgetting the balance of payments, or removing the required 25 percent gold backing of American currency.

In closing, Groff criticized the Treasury Department as "an organization having no faith whatever in the American gold-producing industry."

Mrs. Laity Presents Program

At a recent meeting of Hill and Garden Club, which is a division of the Rocky Mountain Council of Garden Clubs, Mrs. Clifford Laity presented a program on birds. Here, members voted to give to MSM fifteen dollars (of the proceeds of a white-elephant sale) for campus beautification.

McBride Lectures

A number of individuals spoke at the Girls Central Career Day, March 5, when professionals delivered educational lectures to juniors and seniors, intended to help them find fitting professions. Among the instructors for afternoon classes was Professor Louise McBride, who spoke on the teaching of language on the secondary level.

Laity to Journey

W. Clifford Laity, professor and head of the Department of Humanities and Social Studies, will represent the college at the Pacific Northwest Conference on Higher Education, to be programed at Western Washington State College (Bellingham), April 1 through April 5.

The total enrollment of Mines in 1901-02 was 39, as compared to the 1963-64 first-semester enrollment of 484 students.

MIAWS Convention Held In Billings



Mines Sends Delegates

L. to R. Sheila Dorgan, Mary Kay Larsen, Mary Vukich, Kathryn Verona, Lee Ann Peterson, Kay Chambers, Lynn Estey.

Mines Rescue And First-Aid Training

Classes Completed

A course in Mine Rescue Training, as required of all senior students, was conducted at the Original Mine Rescue Station. Twenty hours of instruction are required to qualify for a certificate. Sponsored by the U. S. Bureau of Mines, the course was under the direction of Mr. Don Martin, assisted by Mr. Joe Hodge. Classes had been divided into two groups, the time designated for each as follows:

Group I—Mining, Petroleum, and Geological Engineers, March 2-6, inclusive. 1:00 p.m. to 5:00 p.m.

Group II—Metallurgical and Mineral-Dressing Engineers, March 9-13, inclusive. 1:00 p. m. to 5:00 p. m.

Each student must have a physician's certificate before taking the training in mine rescue. Blank forms are obtainable in the Dean's office. Each senior must have the examination form with him when he reports for the examination. All forms are then to be turned in to the Dean's office. Arrangements for the examination date,, made through the Registrar's office, are financed by the Student Health Fund. The examination is conducted by a group of doctors at the old St. James Hospital on South Idaho Street. Group I — Mining, Petroleum, and Geological Engineers—reported to the hospital at 10:00 a.m., Monday, February 24. Group II—Metallurgical and Mineral-Dressing Engineers—reported at 10:00 a.m., Tuesday, February 25. Students were excused from class for the examination.

First-Aid training, required of all sophomore-engineering students, began in the School of Mines' gymnasium, March 2. Sophomore students were divided into two groups and were told to report to the gymnasium as follows: March 2-6, inclusive—1:30 p.m. to 4:00 p.m., last names beginning with A through L. March 9-13 inclusive—1:30 to 4:00 p.m., last names beginning with M through Z.

Sophomores were excused from all afternoon courses during the period of instruction, but were to report to 4:15 classes as usual.

Seven coeds and the dean of women from MSM attended the MIAWS (Montana Intercollegiate Associated Women Students) in Billings, Friday, February 28-Sunday, March 1. Representatives from eight Montana colleges convened for the meetings.

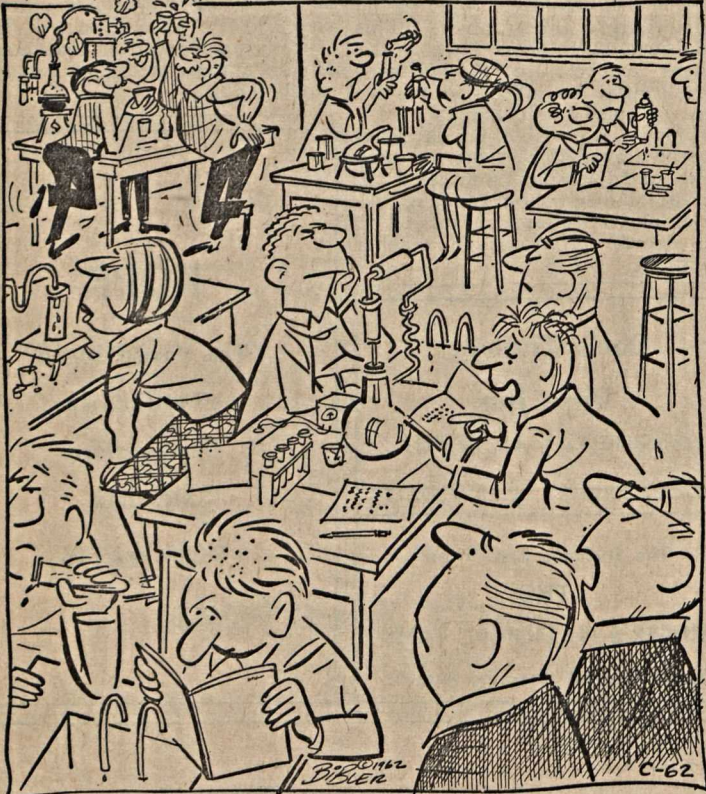
Beginning the sessions Friday night was a speech by Mrs. Gladys Babson Hannaford on the diamond industry. On Saturday morning, various discussion groups met to consider the role and purpose of AWS, as well as the activities and services it offers in colleges throughout Montana. Additionally, speakers gave informational ideas on women in politics, hair styling, and dress and social graces.

Scheduled for Saturday afternoon were the election of state officers and revision of the constitution. On the Constitution Committee are Sheila Dorgan and Kathy Verona from MSM. The officers for the ensuing year are Carol Griffith, president, from Western; Sandy Muckelston, vice-president, from Rocky; Jean Quist, treasurer, from Northern; Sharon Lee, corresponding secretary, from MSU; and Barbara Morgan (MSC), Mamie Keraffa (Carroll), Kathy Verona (MSM) are on the Executive Board. The 1965 convention will be held on the campus of MSC.

The convention concluded Saturday night with a banquet and entertainment by several Rocky students. The delegates returned to Butte Sunday afternoon.

Those from Mines in attendance were Professor Louise L. McBride, dean of women; Lee Ann Peterson, Mines AWS president; Lynn Estey, secretary - treasurer; Sheila Dorgan, vice-president; Kathryn Verona; Mary K. Larsen; Kay Chambers; and Mary Vukich.

LITTLE MAN ON CAMPUS



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MINES vs. NORTHERN



Pat Marx (24) lets one fly, as Frank Sopko (50) prepares to follow up

Do You Know Your Bureau of Mines?

by Lallie J. Mogus

Varied projects are being carried out in office and field by the Montana Bureau of Mines and Geology in an effort to promote efficient development of Montana's mineral resources. Mining engineers and geologists of the Bureau staff work closely with claim owners and small-mine operators to help them to develop their mineral properties. "The principal aim of the Bureau," says Professor Uno M. Sahinen, associate director, "is to perform timely and pertinent studies on the mineral resources of Montana. The resources are continually being studied by the Bureau and the results are made available to all interested parties. Personal inquiries and inquiries from companies interested in establishing themselves in Montana or desiring to contact parties able to supply them with minerals or mineral products are given full and prompt attention."

To date, economic geology studies of Richland, Ravalli, Missoula, Jefferson, and Sanders Counties have been made, the last two in cooperation with the Federal Bureau of Mines. Geologist R. D. Geach is now compiling data for a report on Beaverhead County.

Commodity surveys on talc, graphite, vermiculite, asbestos, pegmatite minerals, mica, fluor spar, gypsum, lime, limestone, sillimanite, wollastonite, sodium sulfate, lightweight aggregate, iron ores, ceramic clay, barite, raw materials for the chemical industry, and corundum have been completed and the information distributed. As a result of the lightweight aggregate study by Professor Sahinen and associates, two lightweight aggregates plants have been established in Montana.

Pumicite and perlite, clay, and limestone information is being compiled for future reports by Geologist J. M. Chelini.

The Bureau is engaged in preparing a series of commodity data sheets designed to inform about and arouse interest in Montana's producible mineral commodities. Phosphate rock, Data Sheet 1, has been completed.

Field work has also been performed by Dr. F. N. Earl on the Winston mining district, Broadwater County, and Allen S. Winters will start on the Castle Mt. mining district, Meagher County. Publications are forthcoming on these areas.

Co-operative ground-water studies with the U. S. Geological Survey is a continuous project which has resulted in published reports on the ground-water resources in Musselshell Valley, Bitterroot Valley, Deer Lodge Valley, and Blaine County. The Bureau and Survey have recently completed a study on Missoula Valley and are engaged at present in studies of the Judith Basin, the Baker area, and Kalispell Valley. Dr. S. L. Groff, Head of the Ground-Water & Fuels Branches, is the liaison between the State and Federal agencies.

A preliminary "Index to Unpublished Geology in Montana," by J. M. Chelini, has been published. The expected result of this study will be the establishment of the Bureau as a clearing house of information on geologic thesis work being done in Montana by all universities and colleges. A final index will be issued in the near future; so only a limited supply of the preliminary report was printed. This Special Publication 29 can be consulted in the Montana School of Mines library.

One measure of friendship consists not in the number of things friends can discuss, but in the number of things they need no longer mention.—Clifton Fadiman

Girls Cut Up In First-Aid Class

Rather than the plight of the familiar "maiden in distress," first-aid class turned into the plight of Russ Bills. The three young damsels taking the course—Paulette Kankelborg, Jeannine Rundle, and Dolly Labranche—found Russ their favorite patient.

These girls are the first females in the history of MSM to take this course. Though they said they enjoyed the publicity, Russ' pride was more wounded than his body when he was pictured surrounded by solicitous females.

The young women found their teacher, Mr. Joe Hodge, most interesting and capable. Applying splints was the most fun, they all agreed. If a neck splint is properly applied, the patient can be "stood" on his head. Of course, the girls were intent on testing their handiwork, but Russ promptly refused. Jeannine said he refused so adamantly that at one point she felt the girls might all become "real" patients.

Each of the girls was impressed by the various means of applying artificial respiration, though they were very disappointed that mouth-to-mouth - respiration techniques were not practiced.



Jeannine Rundle, Dolly LaBranche and Paulette Kankelborg operate on Ric Garcia (story at left).

The Pacific Power & Light Company and the Great Northern Railway Company are co-operators with the Bureau on the Kootenai-Flathead project, which involves the areal geologic mapping and economic study of Lincoln, Flathead, and northern Lake Counties. This is the sixth and final year of the project. Reports in bulletin form have been printed yearly and a compilation will be issued on completion of the study. W. M. Johns is geologist-in-charge of the project and of the Bureau field office in Kalispell.

As a result of a co-operative project with the Federal Small Business Administration, **The Handbook for Small Business Enterprises Engaged in Mining** has been reviewed by the Federal agency, and is now at the printers. Bulletin 30, **Marketing Problems of Small Business Enterprises Engaged in Lead and Zinc Mining**, issued in 1962, is also a result of a cooperative project by SBA and the Bureau.

Dr. R. H. King, Chief of Information-Service, is editor for Bureau publications. He is also the editor for the Bureau's **What d'ya know?** column appearing weekly in the **Montana Standard**. This is a question and answer service offered to the public. Dr. King is currently working on a "Collectors' Guidebook."

R. B. Holmes, draftsman, is kept busy continuously preparing illustrations for publications. F. P. Jones is Bureau assayer.

The Bureau performs a free service for the citizens of Montana in the identification of rocks and minerals. Quantitative analyses or assays are not made. About a quarter of a pound of material is sufficient for a rock or mineral determination. D. C. Lawson, lab technician, performs this service with the assistance of other staff members.

The museum fulfills the requirement of the law that the Bureau "collect typical geological and mineral specimens."

LITTLE MAN ON CAMPUS



"BUT YOU GOT A D- ON THIS PAPER! YOU SHOULDN'T DROP AS LONG AS YOU'RE SHOWING IMPROVEMENT."

The Montana School of Mines Mineralogical Museum collection, conservatively valued at \$250,000, is under Bureau curatorship. J. M. Chelini is museum curator.

At the reception counter Lucille Henneberry and Violet Garner, clerical personnel, are on hand to accept inquiries, distribute literature, and sell maps at the Montana Bureau of Mines and Geology. Lallie J. Mogus is office manager.

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INTRAMURAL CHAMPIONS



Left to right, front row: Ric Garcia, Tim Clark, Gooch Robinson, Curt Peterson. Back row: Paul McHugh, Bill Madison, Ed Simonich, Tom Liebsch.

Intramural Sports

by Lyle Latham

The games played since the last issue of the **Amplifier** found the Boozers, Flunking Five, Downey's Five, Tau Scrubs, Tau Thin-Men, Tapakegabrews, Tau III, Kotow's Group, and RHO III the victors in their games.

The games and high scorers are as follows:

Game Scores and High-Point Men	
Boozers 43.....Tau Thin-Men 62	Tim Clark 18 points
Flunking Five 84.....Tau Scrubs 43	John Connors 22 Points
Downey's Five.....RHO II (forfeit)	
Tau Scrubs 36.....RHO III 22	Magnus 18 points
Tau Thin-men 78.....RHO III 28	Madison 21 points
Flunking Five 92.....RHO I 42	Derzay 26 points
Tapakegabrew 54.....Downey's Five 38	Tholstrom 26 points
Boozers 33.....Other Guys 31	Shear 12 points
Tau III 55.....Tau Scrubs 36	Weaver 18 points
Kotow's Group 47.....RHO II 30	John Giacomino 22 points
RHO III 31.....RHO I 30	Toivonen 14 points
Tau Thin-men 38.....Tapakegabrew 27	Liebsch 16 points
Flunking Five 104.....Downey's Five 30	Armstrong 31 points
(Intramural Scoring Record)	
Tau Scrubs 39.....Otherguys 37	Lindstrom 20 points
Boozers 75.....RHO II 27	Ed Bartlett 21 points
Tau III 64.....RHO I 34	Knuckles 19 points
Tapakegabrew 48.....RHO I 30	Wardell 14 points
Kotow's Group over Tapakegabrew (forfeit)	
RHO III 35.....Downey's Five 34	Toivonen 14 points
Flunking Five 45.....Tau Thin-men 38	Derzay 14 points

Final Round	
Rho I 31.....Tau Scrubs 40	Koger 12 points
Tapakegabrew 49.....Boozers 25	Tholstrom 18 points
Tau III 43.....Downey's Five 34	Knuckles 13 points
Tau Thin Men 56.....Rho III 42	Garcia 13 points
Otherguys 34.....Rho I 32	Buitz 21 points
Tapakegabrew over Rho II (forfeit)	
Tau Scrubs 41.....Downey's Five 31	Sullivan 11 points
Boozers 40.....Flunking Five 44	Poole 11 points
Tau III 31.....Otherguys 26	Weaver 11 points
Otherguys over Rho I (forfeit)	
Tau Thin Men 58.....Tau III 45	Garcia 13 points

Final Standings
The preceding games were the last of the season. The final league standing found the following teams in this order:

1. Tau Thin Men
2. Tau III
3. Tapakegabrew
4. Flunking Five
- (2-3-4-Tie)
5. Boozers
6. Otherguys
7. Tau Scrubs
8. Rho III
9. Downey's Five
10. Rho I
11. Kotow's Group
12. Rho II

Volleyball

The intramural volleyball league was scheduled to begin March 16. Mr. Simonich announced that he has twelve team rosters turned in, and that this is the largest number of teams ever to participate in this sport. The **Amplifier** will carry complete coverage of volleyball throughout the season.

Baseball Begins

The MSM "Lumbermen" got their 1964 practice session under way March 9. Bill Cullen, coach of the team, outlined the plans for the team in the coming season. He pointed out the fact that, although there are only four returning lettermen, the new boys show great promise because of previous experience. Many of the team members have played with local Butte baseball clubs such as the American Legion and the Copper League.

Until the weather permits, the team is now getting into condition by doing calisthenics, running in the gym, and learning the fundamentals of batting. The four returning lettermen are Poole, Busenius, Furaus, and Bennett.

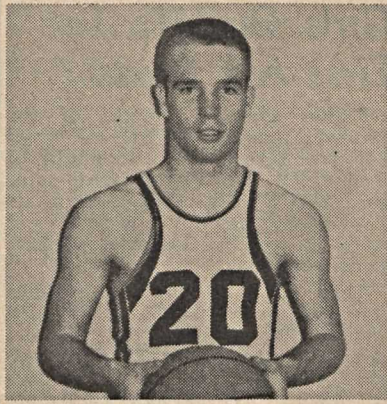
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JIM KRAVIK

Kravik Makes All-Conference

At a recent meeting in Billings, Montana, Jim Kravik was selected as all-conference honorable mention. The coaches of the M.C.C. conference teams selected the all-conference teams. Jim, who averaged nearly 18 points per game, was thrilled to learn of his honor.

Jim, a freshman, stands 6', weighs 165 pounds, and hails from Havre, Montana. In high school, Jim lettered three years in three sports: basketball, football, and track. In 1961 his team won the Montana Class - A basketball championship, and the following year were runners-up.

In his first year at the Mines, Jim lettered in football, playing end on Ed Simonich's football team; he has also lettered in basketball. Jim plans to go out for Bill Cullen's baseball squad and, therefore, to complete a fine athletic career at the Mines.

First All-Conference Team

Name	Team
Joe Rinella	Eastern
Ron Darcy	Carroll
Bob Bradley	Western
John Fagan	Rocky
Jim Noening	Eastern

Second Team

Bill Lowney	Carroll
Dick Sirokman	Carroll
Harvey Munford	Eastern
Glenn Ennis	Northern
Joe Franklin	Rocky

Honorable Mention

Jim Kravik	Mines
Fred Lamereaux	Eastern
Ron Nelson	Rocky

New M. C. C. President

Johnny Frankino, Carroll College athletic director, was nominated president of the M. C. C. at a meeting held in Billings. Ed Simonich was past president and should be commended for a very fine job. While president, Simonich's main jobs were making sure that all players were eligible in the M.C.C. Conference, organizing meetings regarding the selection of all-conference teams, and making up the athletic schedules for the coming year. Recently, Ed went to Kansas City to represent the M.C.C. Eastern, the basketball champions of the conference, were in the Kansas City Tournament.

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BILL CULLEN



by Ed Panisko

With winter nearly behind us, it's time for baseball at MSM. Guiding the "Oredigger nine" is, as usual, Mr. Bill Cullen. The Mines should be especially proud of this man, for it's for pure love of athletics that Bill contributes his time to the Orediggers.

Bill taught in the Butte school system for many years and retired as principal of the Monroe school in 1962.

Active in Butte sports' circles for many years, Bill helped organize the Copper League in 1944 by representing the School of Mines, winner of the first Copper-League Championship. One of his pitchers, Wally Hood, later went on to play with the New York Yankees. His second baseman, Bob McMillan, had two errorless years for the "Golden Buffs" of the University of Colorado.

Bill's career in baseball has been a prosperous one. He has been at the Mines since 1936. He once traded positions with President Koch and coached the school's track team. His Mines teams have won a total of five championships, the last in 1960.

Having twenty early turnouts, Bill will suit-up 16 men for the opener, April 18. So for the Orediggers, and especially Bill Cullen, we give our best wishes for another great season.

Track And Baseball Begin

February 27 opened the track and baseball season with a meeting at 4:00 p.m. Coach Simonich will train the "Thin Clads," starting with calisthenics and running in the gym. Calvin Strobel and Curt Peterson are the two returning MSM lettermen. The college expects better results this season than in previous years. Big Ed encourages anyone interested, even if he lacks experience, to sign up as soon as possible. If the team is in shape, it will participate in the MSC Indoor Meet on April 4.

The 1964 schedule is as follows:
First week of May—MSC Indoor Meet
May
9—District Meet
16—Conference Meet
23—Eastern Invitational Meet

Bob LeCoure Wins Main Event



BOB LECOURE

by Tom Downey

Giving his opponent a 50-pound advantage, Bob LeCoure, 170-pound fighter from Butte, turned in a big upset in boxing circles March 7 at the Butte Civic Center in his winning the heavyweight title. LeCoure, a sophomore student in the general course, used his ring wisdom to out-manuever the much larger heavyweight, Chico-Takes-a-Horse, from the Crow Agency Indian Reservation.

Skillfully bobbing and weaving, LeCoure managed to draw the 218-pound Takes-a-Horse out of position through the first and second rounds. Missing most of his punches, thrown at the head and body of the smaller and quicker LeCoure, the huge heavyweight was made to appear sloppy and cumbersome. As the third round came to an end, Takes-a-Horse had LeCoure in what appeared to be serious trouble, but Bob gamefully fought back to ward off the desperate efforts of his opponent.

LeCoure's victory over the bigger man won him the heavyweight crown, at the same time giving his team, the Butte Boxing Club, the team championship by a narrow margin of one point. LeCoure plans to fight in the Nationals March 27, 28, and 29, at Helena. However, he expects to be in better condition and a few pounds lighter for the Nationals, where he expects to fight as a middleweight.

BASEBALL SCHEDULE IS AS FOLLOWS

April
18—Western in Butte
25—Western and Northern in Havre
May
9—Eastern and Rocky in Billings
22—Rocky and Western in Butte



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